

William Tyner: (Anthropologist)

He is an anthropologist, technologist, and filmmaker.

Anthropologist is a scientist in human sciences and culture field.

He uses different types of digital technology tools in various fields of his work, to find real solutions to problems.

William Tyner works with various organizations that help people connect with other people or services that can help them.

Organizations do this by building easy-to-use digital technology tools and applications that give people the information they need.

The Technology Digital Tools such as

Book train, bus,
and plane tickets
online

Payment of various
bills through
applications

Book tickets to visit
some of the historical
and cultural sites

Reach to information
in Egyptian Knowledge
Bank website

Vocabulary:

anthropologist	عالم في علوم الانسان الثقافية	Book	حجز
technologist	خبير تكنولوجي	Payment	دفع
various	متنوع	cultural	ثقافي
fields	مجالات	historical	تاريخي
organizations	منظمات	bills	فواتير

The important terms:**Digital citizenship:**

- is the ability to use digital technology tools in an ethical, responsible and secure manner.
- it helps you to protect your digital footprint.

**Digital footprint:**

- It's a record of everything you do online, which includes the websites you visit and everything you share with others.
- It may also include what others share about you.

**Online piracy (hacking):**

- It's the illegal use of content with the aim of sharing or selling it to others.

ICT_Primary 4_Axis (3)

Digital Citizen's Rights:

1

- The right to be protected against online hacking.

2

- The right to not copy your digital footprint or share your videos, songs and stories without your agreement.

3

- The right to interact with others online, such as your family members, teachers, and friends.

4

- The right to share and access information online, with writing the sources from which you get the information.

5

- The right to use the Internet when you need or want to, while respecting the law.

Digital Citizen's Responsibilities:

1

- You should never hack protected content, with the intention of sharing it with others or selling it.

2

- You should display a positive attitude in your interactions with others online.

3

- Be sure to rate what you're watching or what you're going to share.

4

- Be sure to evaluate how you use the Internet and use up-to-date software.
- Be sure that what you watch is a productive use of time.

5

- Be sure that content you interact is safe and use strong passwords.
- You should know if it bring you joy or stress you out.

Vocabulary:

digital citizenship	المواطنة الرقمية	illegal use	استخدام غير قانوني
digital footprint	البصمة الرقمية	respect	يحترم
online hacking	القرصنة عبر الانترنت	the law	القانون
digital citizen	مواطن رقمي	content	محتوى
rights	حقوق	responsibilities	مسؤوليات

In 2018, The Egyptian government provided the technology digital tools and sources that help you enjoy your time.

Positive effects of ICT:

- Use the technology digital tools such as: digital books, activities, watching videos and educational TV channels.
- Help people who have speech difficulties to communicate with others or learn the language in school using images.
- Help students who can't leave their homes with health problems to contact with teachers and materials that needed to learn.

THE IMPORTANT TERMS:



Video sharing platforms:

- A website that lets people upload and share their video clips with the public.
- You can use these platforms to learn new things or teach them.
- Notice to ask a family member or your teacher before share any video online.



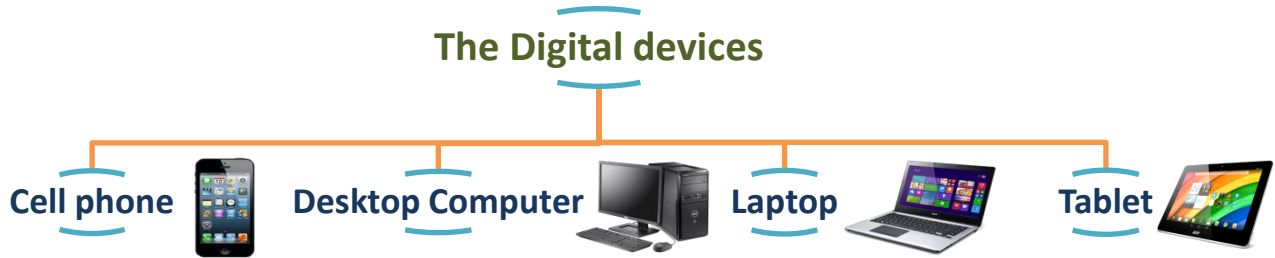
Social Media platforms:

- websites and applications that enable users to create and share content or to communicate with others.
- You can work with your classmates outside of school on a project.
- You can join an online group with similar interests in sports, movies and games such as chess.
- Common communication apps: Social Media platform Facebook, the messaging app WhatsApp and virtual meeting app Skype.
- Notice to ask your parents or your teacher before join any group or communicate with someone online.



Egyptian Knowledge Bank (EKB):

- It holds webinars for teachers, students and parents, to provide guidance and advice on how to register and use the site.



Vocabulary:

platform	المنصة	webinar	ندوة عبر الانترنت
classmates	زملاء الفصل	guidance	ارشادات

LESSON (4)

Internet Communication

Vocabulary:

Synchronous	المتزامن	response	استجابة
Asynchronous	غير المتزامن	formal	رسمي
Instant	فوري	colleague	زميل
transfer	تبادل	an official	احد المسؤولين
Cell phone	تليفون محمول	government agency	جهه حكوميه

Cell phone application:

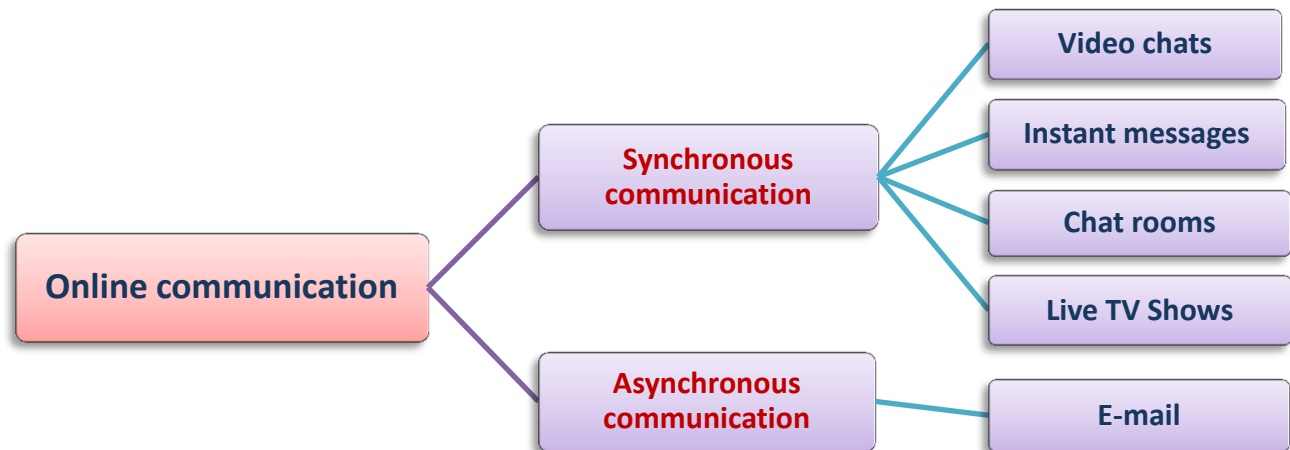
It is an application that runs on your mobile device and gives you direct access to different programs.

Such as:

E-mail, instant messaging, social media pages, and video chats.

Notice

Some of these applications may be installed on your cell phone device, while others need to be downloaded.



ICT_Primary 4_Axis (3)

<i>Synchronous Communication</i>	<i>Asynchronous Communication</i>
<p>Definition:</p> <ul style="list-style-type: none"> - It is a communication that happens in real time by instant responses. - Transfer of information or files between two persons at the same time by various digital tools <u>such as</u>: <ul style="list-style-type: none"> ➤ Conversations ➤ Instant Video ➤ Live TV Shows ➤ Instant chat rooms 	<p>Definition:</p> <ul style="list-style-type: none"> - It is a Communication that doesn't require an instant response. - Transfer of information or files between two or more persons without reply at the same time by various digital tools <u>such as</u>: <ul style="list-style-type: none"> ➤ Sending file by e-mail ➤ Recorded educational programs
<p>Video chats:</p> <ul style="list-style-type: none"> - Allow you to communicate with one or more persons by a digital device. <p>Needed Tools:</p> <ul style="list-style-type: none"> - A digital device with camera and speakers. - Cell phone application or video chat software. 	<p>Email:</p> <ul style="list-style-type: none"> - You can use email to send and receive messages. - Messages are more formal than instant and text messages. <p>For example:</p> <ul style="list-style-type: none"> - Send an email to ask a colleague to help you solve a problem. - Send an email to your teacher about school project. - Use an email to communicate with a government agency or with an official. <p>Needed Tools:</p> <ul style="list-style-type: none"> - A web browser to access the email website. <p>OR</p> <ul style="list-style-type: none"> - Email app on your mobile device.
<p>Instant messages: (IM)</p> <ul style="list-style-type: none"> - Allow you to send messages using Internet. - Messages can include only text or have images or videos. <p>Needed Tools:</p> <ul style="list-style-type: none"> - An instant messaging program on your computer or a mobile application. 	
<p>Chat rooms:</p> <ul style="list-style-type: none"> - Allow you to communicate with groups and discuss one topic only. <p>Needed Tools:</p> <ul style="list-style-type: none"> - Internet browser to access the Internet. - OR an application for cell phone such as: Internet Explorer or Google Chrome 	

Making video chats

Steps to make a video chat:

- Make sure the microphone and camera are ON.
- Create a link to a video chat and send it to the participant (or participants).

Steps to join a video chat:

- Make sure the microphone and camera are on.
- Click on its link and wait for the person who started the call to be 'let in'.
- You can also reply to the call by clicking on the phone/video icon.
- You can turn off the microphone or turn off the camera at any time.

Video chat rules:

- Sometimes, the person in charge of the call may mute people's microphones.
- If the camera is on, anyone who is on the call will be able to see you.
 - Be properly dressed, and behave as if you were out in a public.
- Speak when it's your turn.
- Make sure that there is nothing in the background that points to your address or any personal information that you do not want to share.

Chat rooms:

- You can simply write your comment and send it.
- You can reply to messages too.
- Some participants may also reply to your message.

Chat rooms rules:

- Anyone who has access to the chat room will be able to read your messages.
- Be polite, helpful, and positive.

Instant messaging:

It is a fun and informal way to communicate.

Steps to send an instant message:

- Click on the name of the person you want to chat with.
- Type your message.
- Click the "Send" icon.

Instant messaging rules:

- Use phrases instead of full sentences
- Use emotion icons or images for communicate
- It is important to show an ethical and responsible manner.

ICT_Primary 4_Axis (3)

Email:

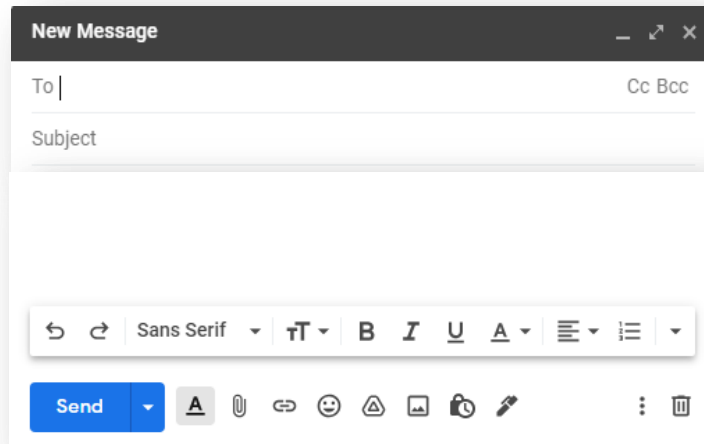
- It is common to use emails in more formal situations.
- Such as: creating an account with EKB to send an email to your teacher.

Steps to send an email to someone:

- Type their email address in "to:" line.
- Provide clear information of the message in the "subject:" line.
- When writing an email, make sure to use correct grammar.
- Click the "Send" icon.

Sending email rules:

- Be polite and clear.
- Use greetings and endings.
- Be sure when sending attachments that are safe and accurate.



Vocabulary:

participant	مشارك	accurate	آمن
informal	غير رسمي	provide	يزود
subject	موضوع	Attachments	المرفقات
accurate	آمن	properly dressed	يرتدي الملابس المناسبة

LESSON (6)

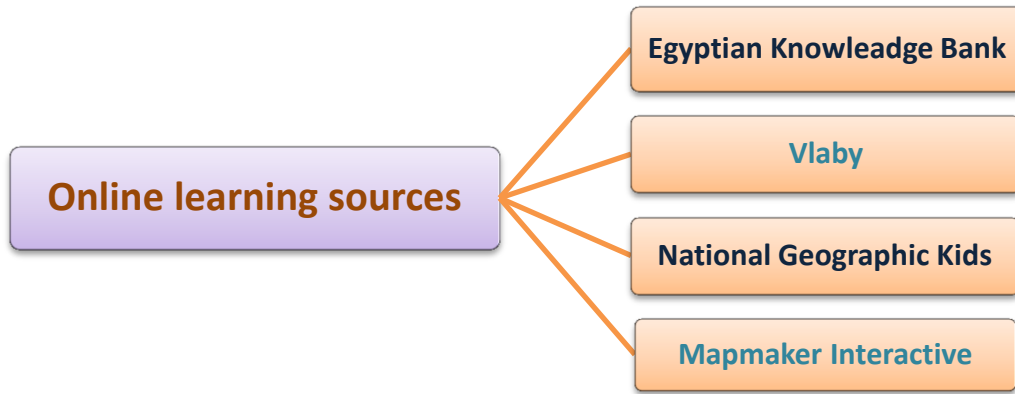
Online learning environments and sources

Online learning environments

- **Edmodo** one of online learning environments that allow teachers and students to communicate, no matter where they are.
- Teachers can upload virtual lessons, quizzes and homework for students to access.
- Students can communicate with their teachers and post their completed assignments.



ICT_Primary 4_Axis (3)



Online learning sources



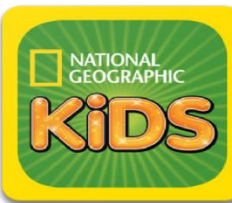
Egyptian Knowledge Bank (EKB):

- The first electronic library in Egypt that contains resources of variety of subjects.
- You can search and view different topics, digital articles and videos with just a click.



Vlaby:

- A virtual labs platform that enables students and teachers to do lab experiments in an interactive environment.
- It isn't only informative, it is fun too!



National Geographic Kids:

- A popular online resource for kids to find information on a variety of subjects, about animals, science, history and geography.



Mapmaker Interactive:

- A special interactive feature provided by National Geographic.
- Mapmaker Interactive provides online mapping tools for students and teachers.
- It allows using of map themes, data, and tools.

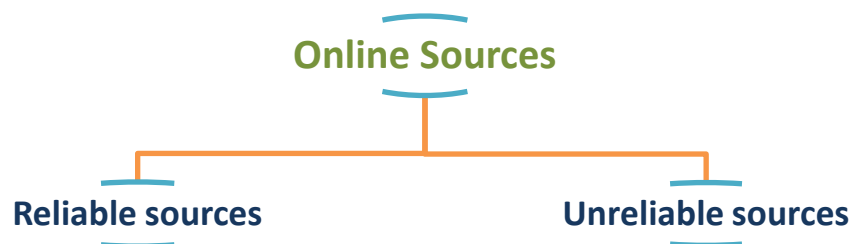
Vocabulary:

environments	بيئات	assignments	المهام الدراسية
Virtual	افتراضي	completed	المكتملة
Topic	موضوع	Articles	مقال
lab	معمل	experiments	تجارب
interactive	تفاعلية	Themes	سمات
Feature	ميزة	informative	غني بالمعلومات

- It's important to plan before you do any digital research.
- Planning will help you focus your research on the information you're trying to collect.

Steps to make a digital search for reliable content:

- **Focus** to choose the topic of your research.
- **Ask** yourself what did you know and what do you want to learn.
- **Choose** the types of online sources you will use.
- **Collect** the information that seems to answer your questions.
- **Evaluate** the information which you collect, is it reliable?
- **Think** and write notes.
- **Write** down what you're going to use from the source material.
- **Cite** the source of information in your notes.



Reliable Sources	Unreliable Sources
- Reliable sources are articles or information written and verified by experts.	- You may find correct information on social media such as Facebook, wiki pages, and blogs.
- The information is presented in a professional present.	- You also likely that you will find information full with opinions, mistakes and even lies.
- The source information is well-written without grammar and spelling mistakes.	- You have to be careful when using the information you find in these types from sources.

Organize and write your report

- After you've completed your online searching, gather your notes and reliable source information.
- Use your notes to write an outline. This will help you present the information in your report in a logical way.

ICT_Primary 4_Axis (3)

Steps to write an outline of writing report:

- It should include an introduction that presents the topic of the report.
- It should include paragraphs that provide information.
- It should include a conclusion or final thoughts on the information you have presented.
- It should include the source of information that you write in your notes and document it in your report.

Vocabulary:

Focus	ركز	Outline	مخطط
Collect	اجمع	Verified	تم التحقق
Evaluate	قيم	Experts	خبراء
Cite	استشهد	Organize	نظم
Reliable	موثوق	Report	تقرير
Unreliable	غير موثوق	Conclusion	خاتمة
Thoughts	أفكار	Present	تقدم

LESSON (8)

Synchronous and asynchronous communication

Synchronous communication is appropriate:

- Between friends or close family members.
- When information is urgent or needs to be transmitted quickly.
- When information is about day-to-day life matters.
- When the answer doesn't require much thought or preparation.

Asynchronous communication is appropriate:

- Between people who don't know each other well.
- When information is important but not urgent.
- When information is about sensitive or complex matters.
- When an answer needs to be thought and prepared.

Vocabulary:

appropriate	لائم	matters	الأمر
urgent	عاجل	preparation	تحضير
transmitted	تنقل	complex	معقد

Gautam Shah: (IT specialist)

- He is an **IT specialist** and he is the founder of "*Internet of Elephants*" organization.
- He lived in many countries including the USA, India, Argentina and Kenya.
- He quit his IT job in 2014 and began looking for ways to use technology to use for wildlife conservation.
- Wildlife conservation is protecting animals in their natural habitats.
- **Gautam Shah** believes in using technology and online games to bring wildlife into people's daily lives.
- **Gautam Shah** decided to use his skills to make a positive impact on wildlife.

The Internet of Elephants

- It is an organization that uses ground-breaking digital tools to connect people with wildlife around the world.
- The team at *Internet of Elephants* with other animal conservation organizations from all over the world.
- The team uses the data which they collect via **GPS** to design interactive online games.
- *Internet of Elephants* creates unique mobile games, using **augmented reality technology**, and data display effects that allow people to interact with wonderful creatures.



Augmented reality technology:

- It lets you to virtually see the real environment of things you would like to see.
- It provides information about them through displays and digital devices prepared for this purpose.
- The games tell the stories of each animal, and players can follow their daily life.
- The mobile games mean that wherever you are in the world, you can interact with amazing animals in countries close to your country or far away!

Vocabulary:

The founder	مؤسس	Ground-breaking	رائدة
IT specialist	متخصص في تكنولوجيا المعلومات	Augmented reality	الواقع المعزز
Wildlife	الحياة البرية	Creatures	مخلوقات
Conservation	الحفاظ على	Positive impact	تأثير إيجابي

LESSON (2)

Problem-solving skills

The important terms:



Problem-solving skills:

- It is a set of steps that you use to solve a problem of ICT.
- It makes the problem solving process easier.
- If these problems are complex, work on breaking these problems into small parts (sections) and solving them step-by-step.



A hypothesis:

- It's an educated guess about how things work.
- It is an attempt to answer your question with an explanation that can be tested.

Steps to solve a problem:

- Building a hypothesis.

- Test your hypothesis.

- If your test isn't successful, don't worry. we learn from our mistakes.

- Learn how this can help you make your next hypothesis.

- If you have a group of people solving a problem, assign each person one section.

ICT_Primary 4_Axis (4)

Examples of solving ICT problems

The speakers are not working:

- Check the cable of speakers into C.P.U.
- Check the cable of speakers into electricity.
- Restart your computer.
- Ask your teacher or a family member to help.

The computer is having difficulty responding to user commands:

- Press "Alt + Ctrl + Del" from keyboard together.
- Restart your computer.
- Ask your teacher or a family member to help.

Word program is not responding to typing:

- Make sure the keyboard connection cable is plugged into the correct place.
- Reopen the Word program.
- Write some letters on the word program page.
- Try another keyboard and plugged its cable in the correct place.
- Restart the computer.

Vocabulary:

Problem-solving skills	مهارات حل المشكلات	an attempt	محاولة
complex	معقد	plugged	توصيل
breaking	تقسيم	respond	استجابة
sections	أجزاء	explanation	تفسير
A hypothesis	فرض	assign	حدد - خصص

LESSON (3)

Presenting information to others

Think about the digital tools you'll need to best presentation of information.

Create a digital poster or billboard design

Office 365's bundle:

- It is a suite of apps that help you stay connected and get things done.
- Such as: Word® · Excel® · PowerPoint® · Microsoft Teams® · Publisher®.



ICT_Primary 4_Axis (4)

When creating your poster or billboard, think about the following digital concepts:

Margins

- A margin is the space left around the edges of a poster or billboard.
- It is important to leave this space empty.
- If you add content too close to the edges, the poster or billboard will look cramped and crowded.
- A 25 mm margin will help design a good poster.

Font size and type

- If you choose a small font size, your audience will have to work hard to try to read the information.
- If you choose font size that's too big, you will have to shorten the information you share.
- Make sure to choose a font size that is easy to read.
- **Simple** is better, a complicated font is distracting and hard to read.

Colors

- Choose colors that help you get your message across.
- Use color combinations that match.
- It is best to use no more than three colors in the poster.
- Take in consideration the color of the background when choosing the font color.

Images

- Use images that match with the content you are sharing.
- Use clear, good-quality and appropriate images.

Example:

Wildlife Conservation

- Protect plant and animal habitats.
- Protect wild animals from pollution.
- Protect wild animals from hunted and sold.



ICT_Primary 4_Axis (4)

Vocabulary:

bundle	حزمة	distracting	تشيت الانتباه
Margins	الهوامش	combinations	تناغم
the edges	الحواف – الأطراف	in consideration	في الاعتبار
cramped	ضيق	appropriate	مناسب
crowded	مزدحم - مكتظ	audience	الجمهور متلقي الاعلان

LESSON (4)

Digital applications

- The first thing the explorer does is to research about the topic.
- When you research you need to use a variety of sources.

The information Sources

Print

Books - Articles - Newspapers - Encyclopaedias

The Internet

Search Engine - Specialized Websites

Digital Learning Websites - Egyptian Knowledge Bank

Interviews

With people who have experienced, Affected, or who have studied the topic.

Evaluate The Information Source

Trusted Source	Questionable Source	Untrusted Source
<ul style="list-style-type: none">✓ The information comes from a reliable person or organization that uses reliable sources.✓ A reliable person or organization cites sources and states current facts.	<ul style="list-style-type: none">⚠ The information comes from a person or organization that offers some sources.⚠ A person or organization sometimes states their opinion intermixed with facts.	<ul style="list-style-type: none">✗ The information comes from a person or organization that doesn't have sources.✗ A person or organization uses opinions with little facts.

Using Microsoft Word & Microsoft Excel



Microsoft Excel:

- Excel allows you to create a spreadsheet with as many columns and rows as you need.
- Excel is used to present numbers because it is able to add them automatically.
- Spreadsheets are an excellent way to gather information and gather your ideas.

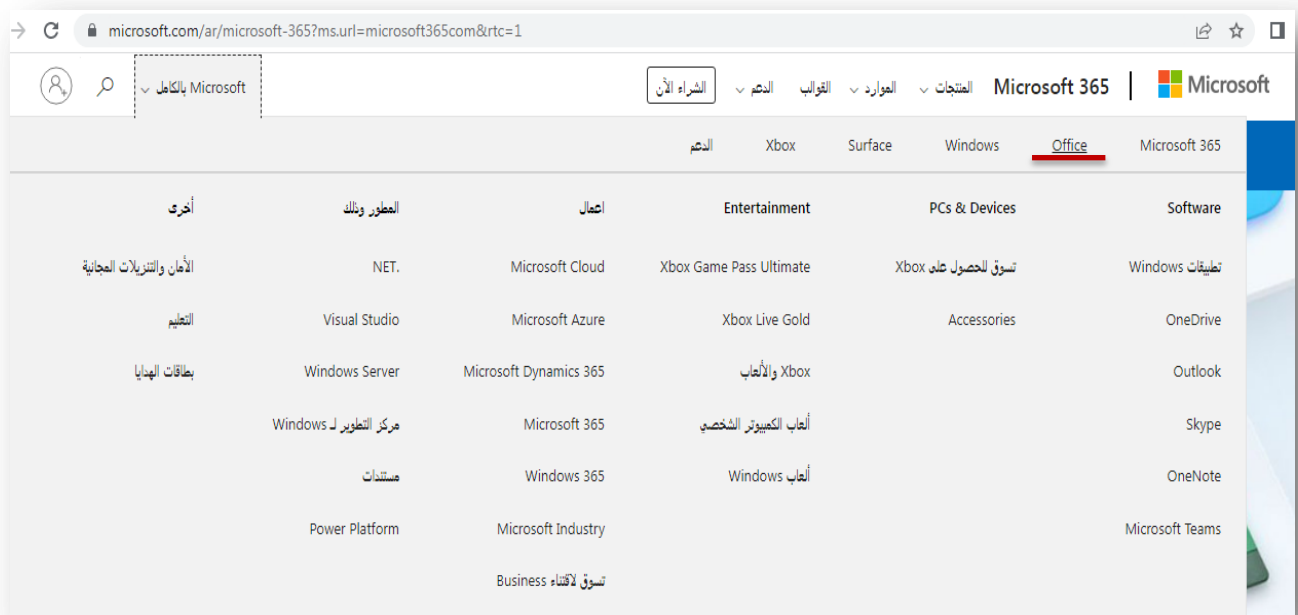


Microsoft Word:

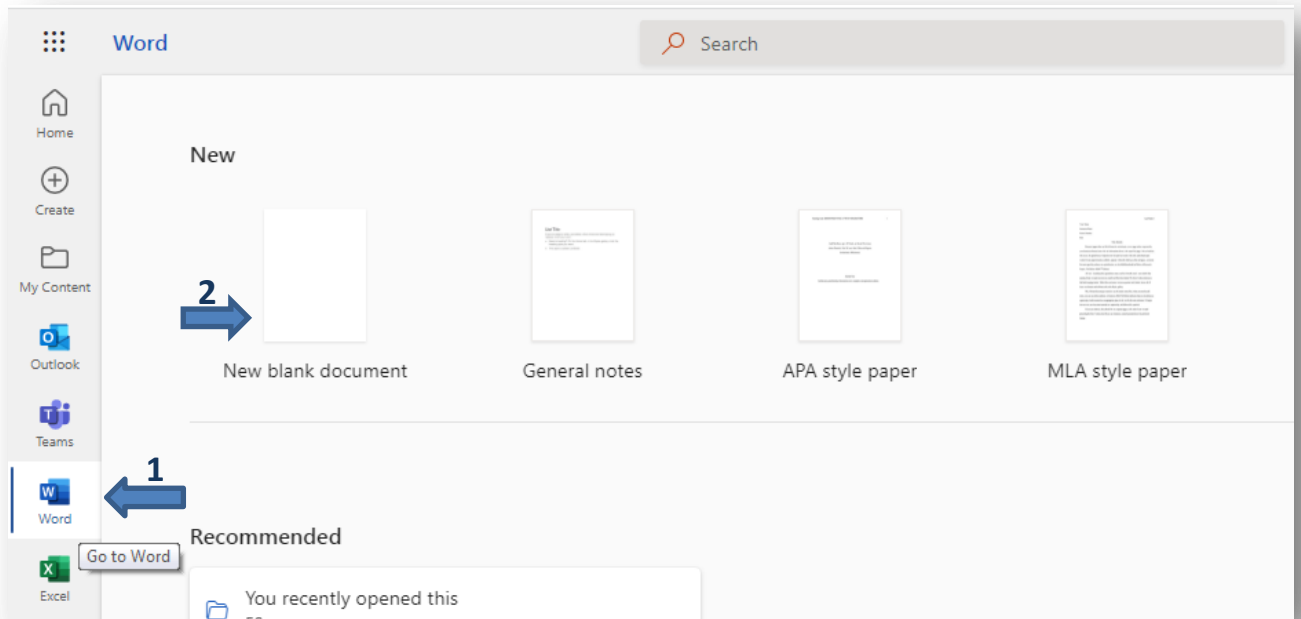
- Word allows you to present your ideas in a variety of ways.
- Word is commonly used to write whatever you want.
- You can change the design, add images, and link your report to websites or information on the Internet.

Steps To open Microsoft Word program:

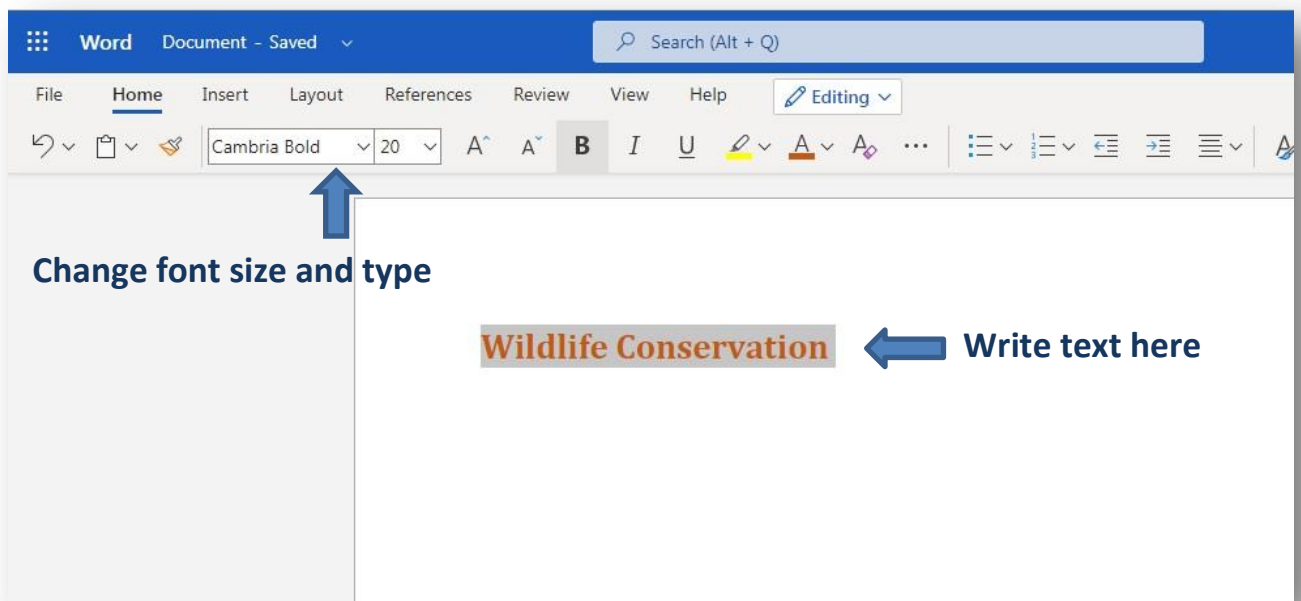
- Open Internet Explorer Browser.
- Write www.Microsoft365.com in address bar.
- Click Enter from keyboard.
- Sign in with your account on Microsoft 365.
- Click on Word icon and Click new blank document.



ICT_Primary 4_Axis (4)



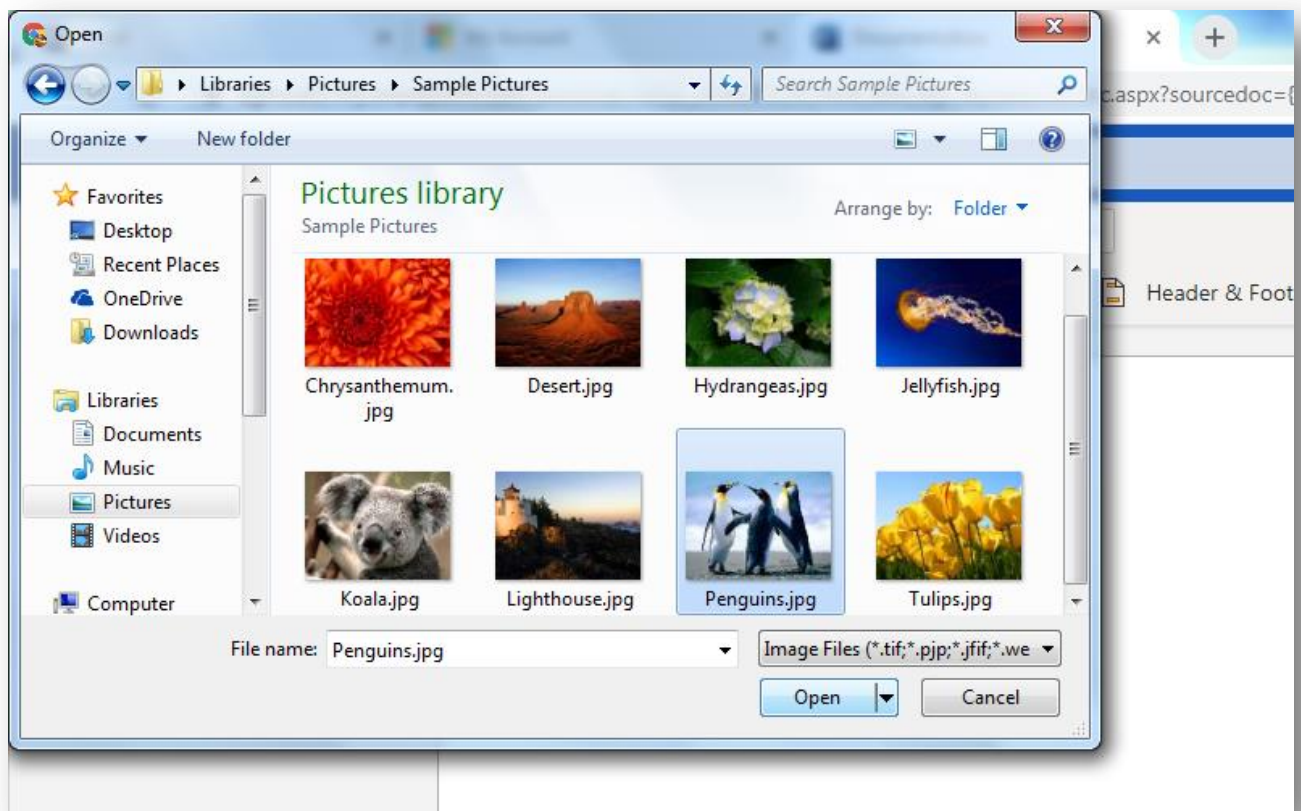
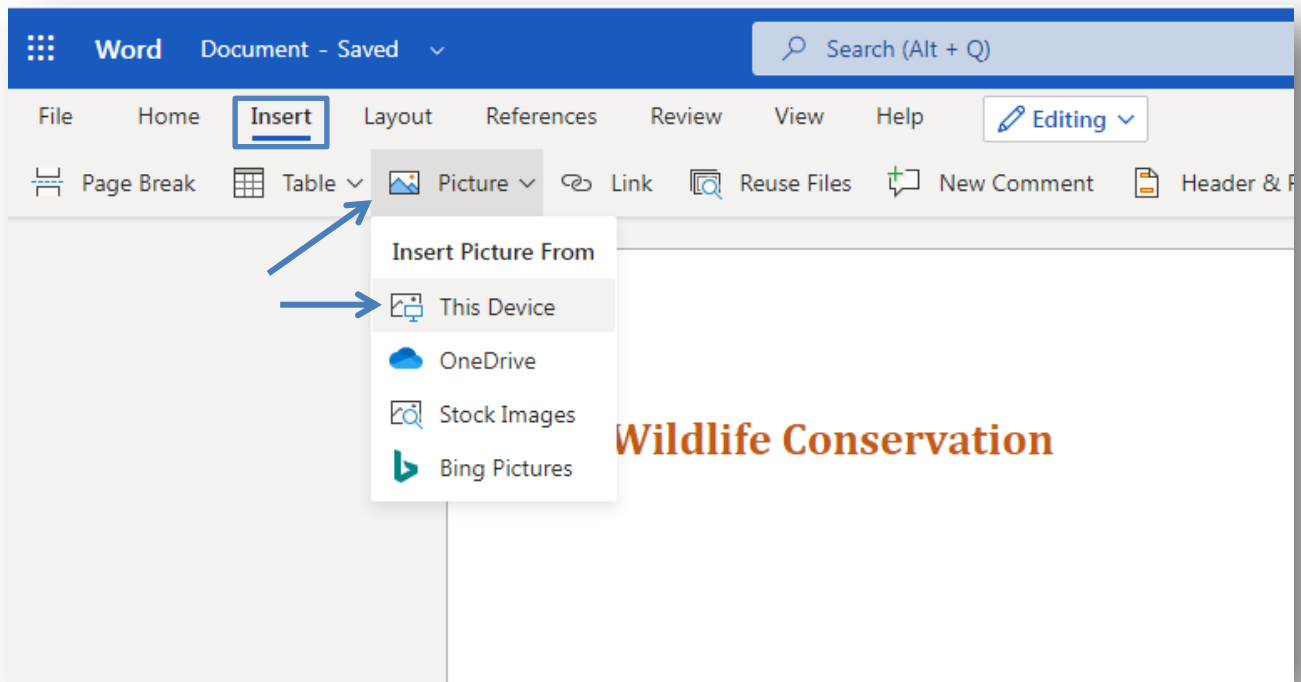
- Write your text and format it from format bar.



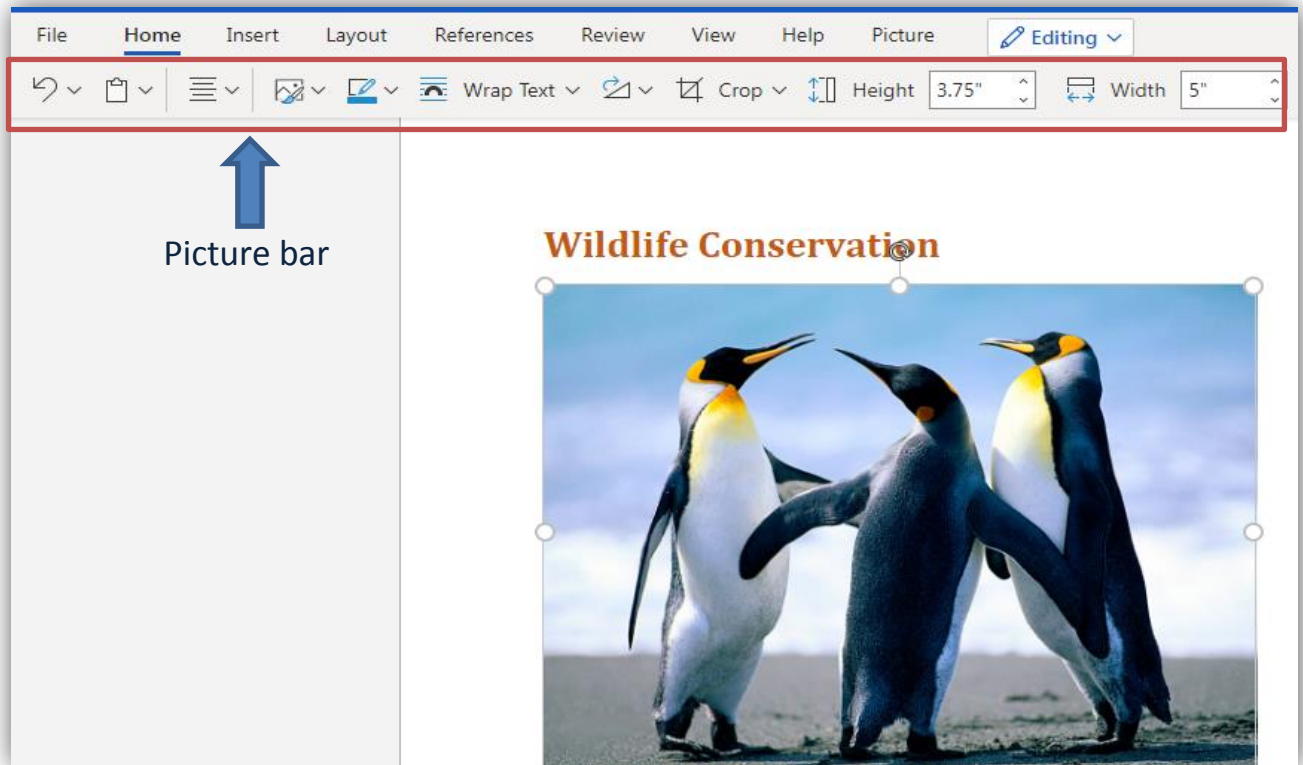
Steps To insert image to your document:

- Click insert menu.
- Click picture.
- Insert picture from This Device.
- Select a picture from your device Then Click open.
- Note The picture bar is appeared.

ICT_Primary 4_Axis (4)

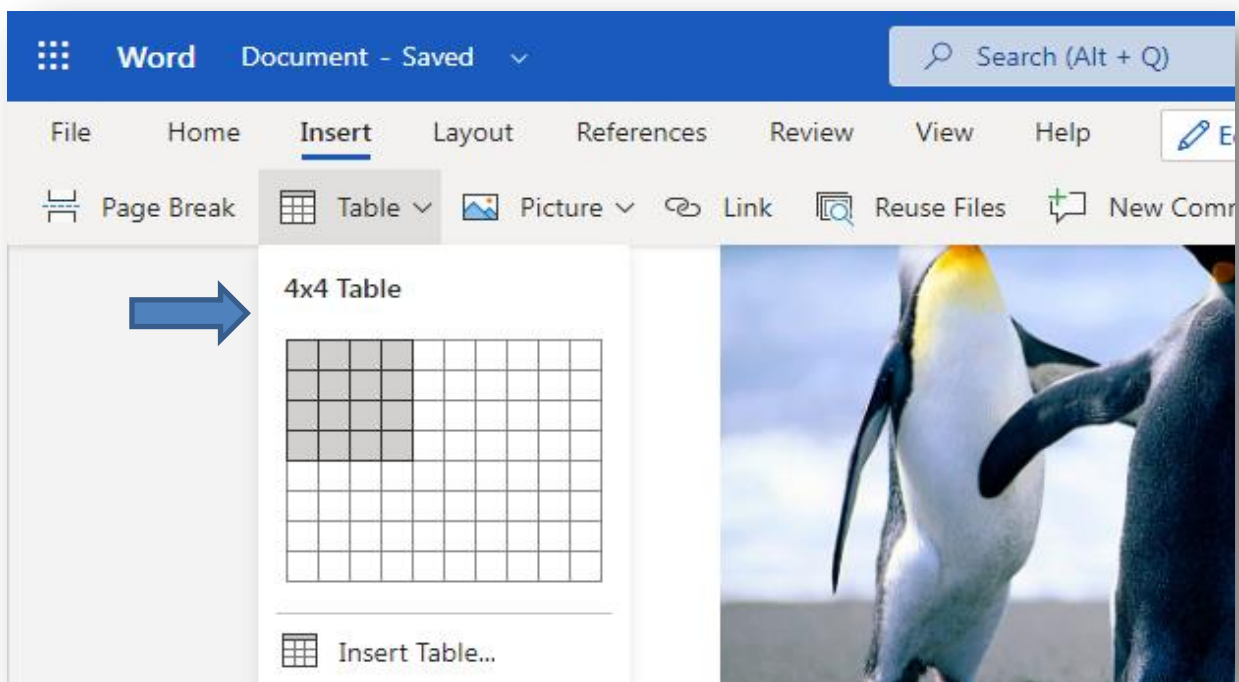


ICT_Primary 4_Axis (4)

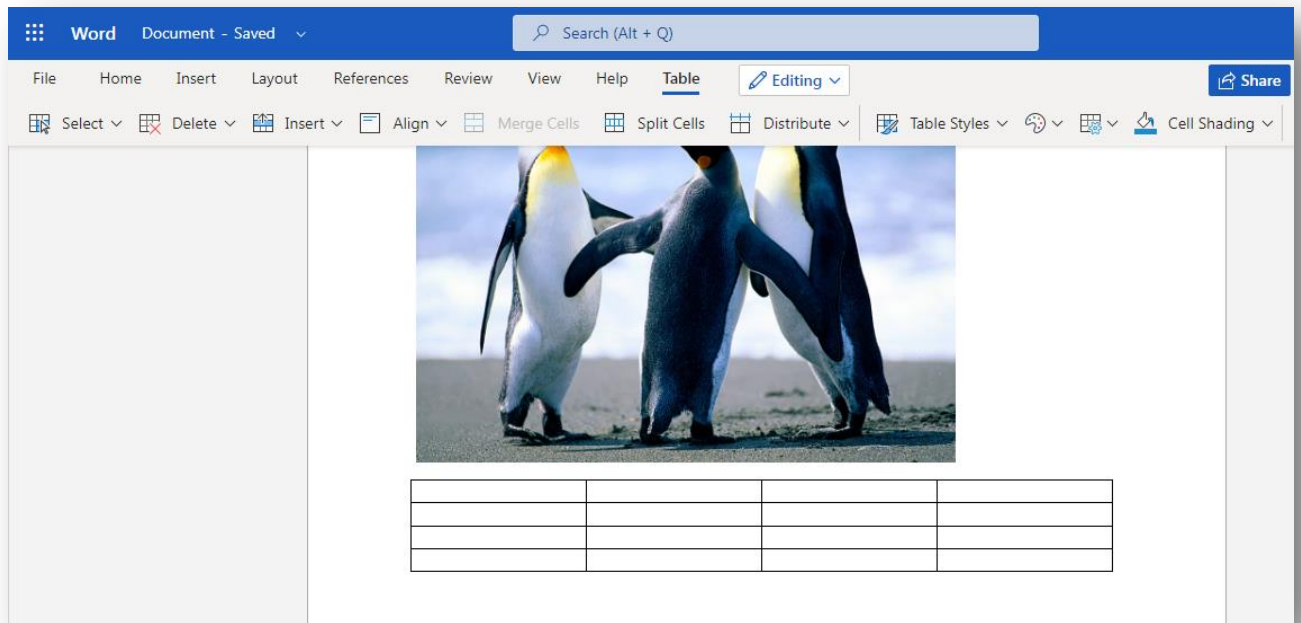


Steps To insert table to your document:

- Click insert menu.
- Click table.
- Select number of rows and columns that you want.
- Note The table is drawn.

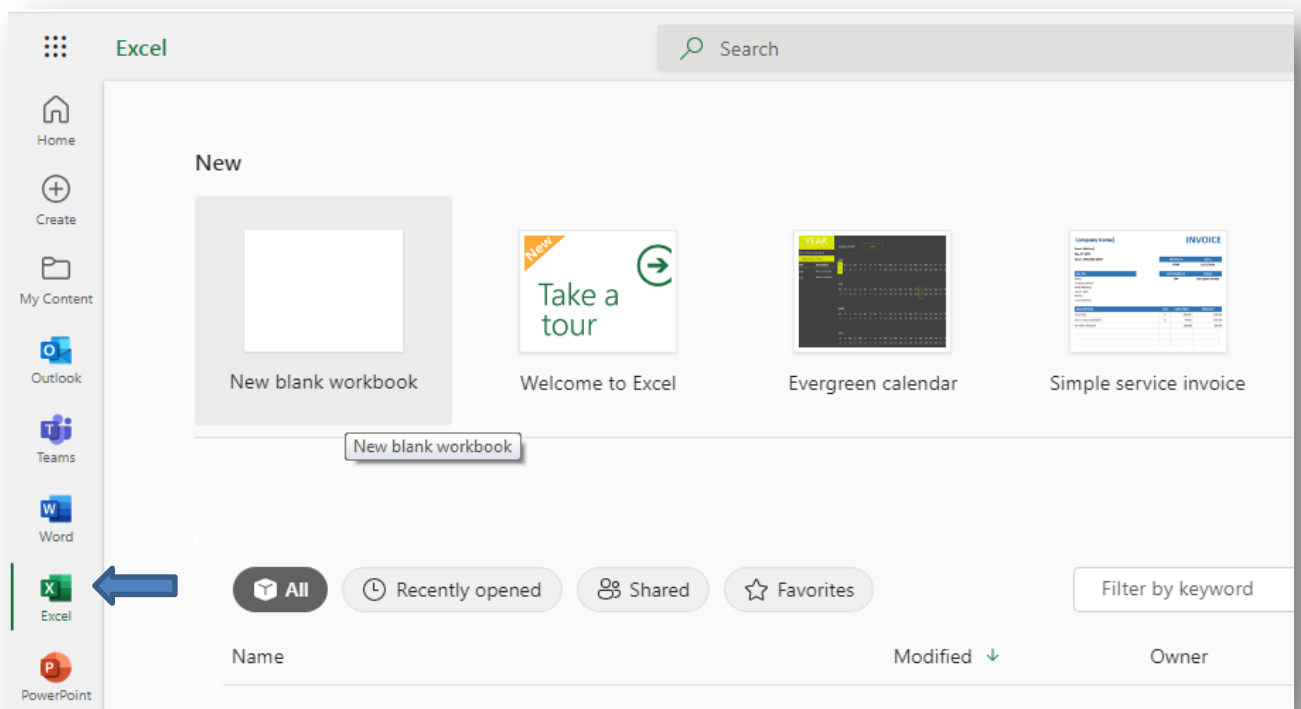


ICT_Primary 4_Axis (4)

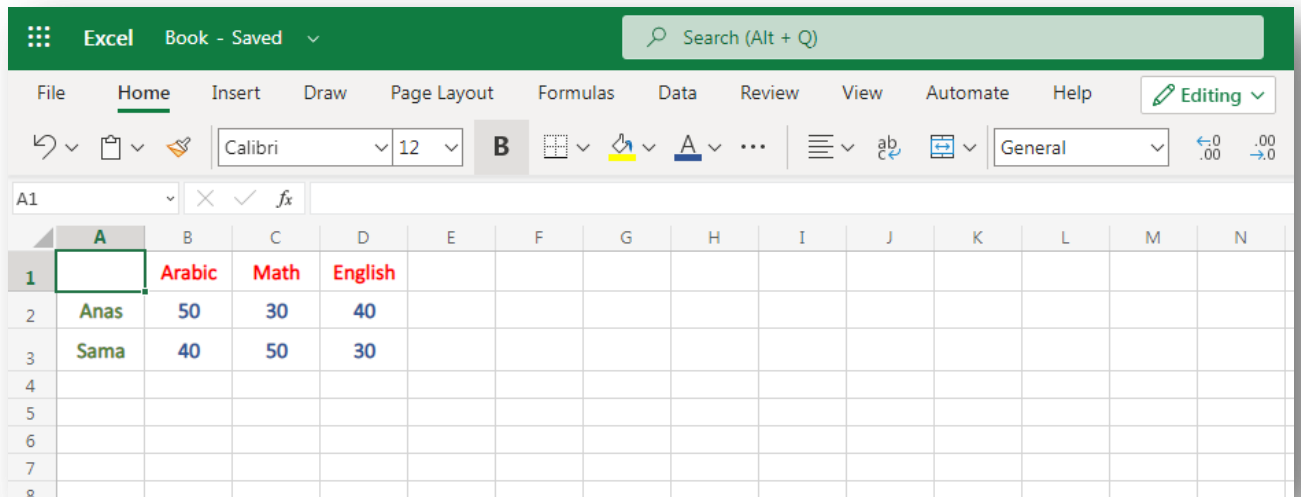


Steps To open Microsoft Excel program:

- Click on Excel icon and Click new blank workbook.
- Write your data and format it.

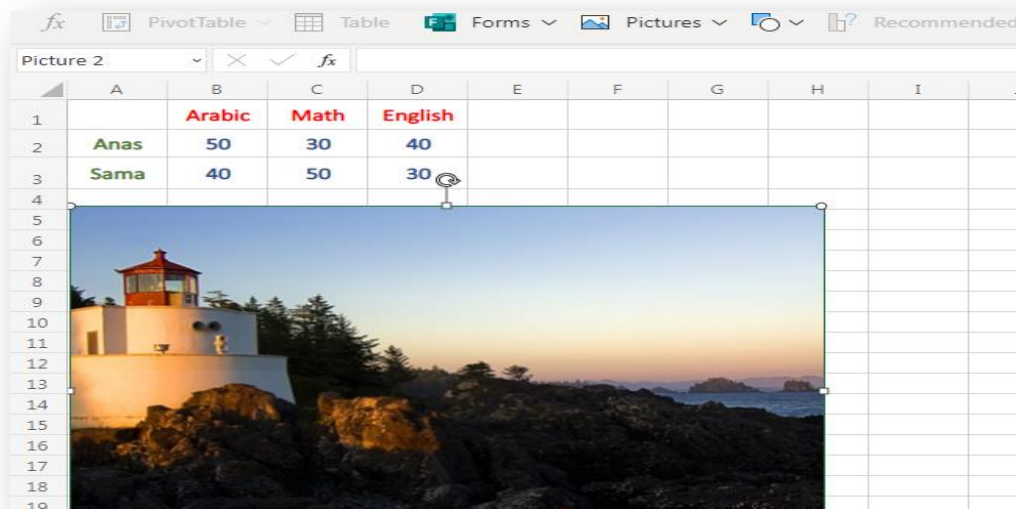
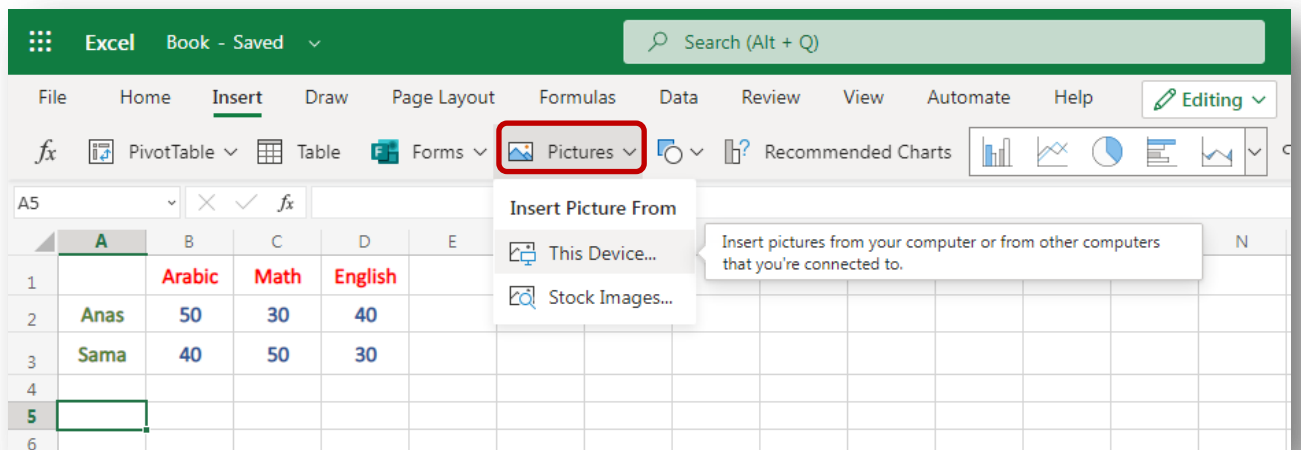


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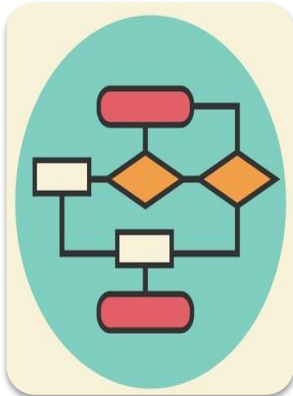


Steps To insert a picture to your workbook:

- Click insert menu → Click picture → from This Device.



The important terms:

**Algorithm:**

- It is **a series of steps** that explain how to do a task.
- The search engine uses algorithms to provide results.
- When you enter the keywords you're searching for, the search engine takes steps to provide results.
- Algorithms help search engine to decide which results will be more relevant to your research.
- If your wording is not specific enough, the engine's algorithm may not be entirely accurate.
- Computers and applications use algorithms to perform specific tasks.

Example:

Many of the things you do every day can be described as **algorithms**, a series of steps

Steps to clean your room:

- 1- Clean the dust.
- 2- Wipe flat surfaces.
- 3- Clean the floor.

Steps to give direction:

- 1- Go straight ahead.
- 2- Turn Right at 'X'.
- 3- Turn Left at 'Y'.



- If you are using a search engine to find directions to a place, it will use a database of names and information from digital maps to provide you with the results.

Vocabulary:

Algorithm	خوارزمية	results	النتائج
a series of steps	سلسلة من الخطوات	more relevant	أكثر أهمية
explain	يشرح	entirely accurate	دقيق تماماً
provide	يزود	perform	ينفذ
specific	محدد	described	وصفها

The important terms:



Coding:

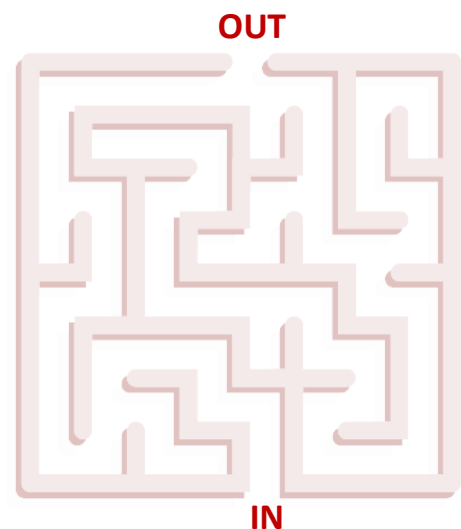
- It is writing of multiple algorithms to make a complete program.
- You can create animations, movies and video games using code.
- There are many websites like [Code.org](https://code.org) that can help you learn to code using different programming languages.



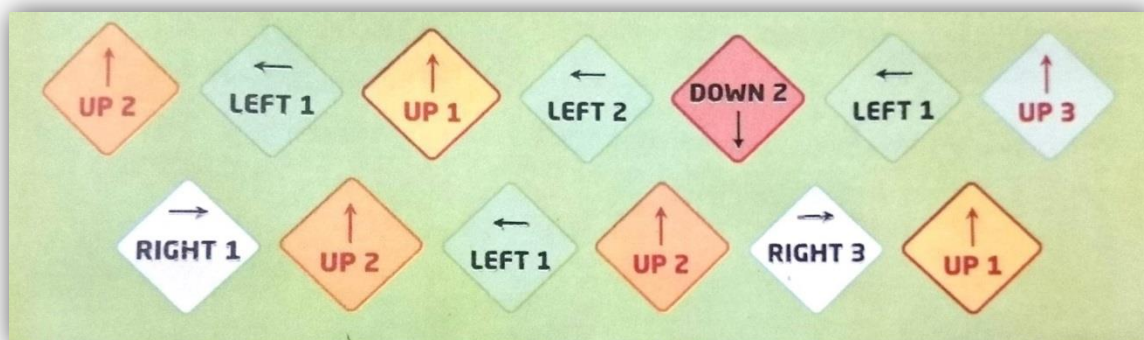
You can create mazes on [Code.org](https://code.org). Mazes are just one example of things you can create using coding.

Example:

- Think about the steps you can use to get through the maze.
- The steps contain the number of spaces to take, and in which direction.
- Follow the steps to get through the maze.

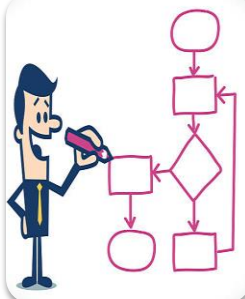


Instructions to solve a maze:



ICT_Primary 4_Axis (4)

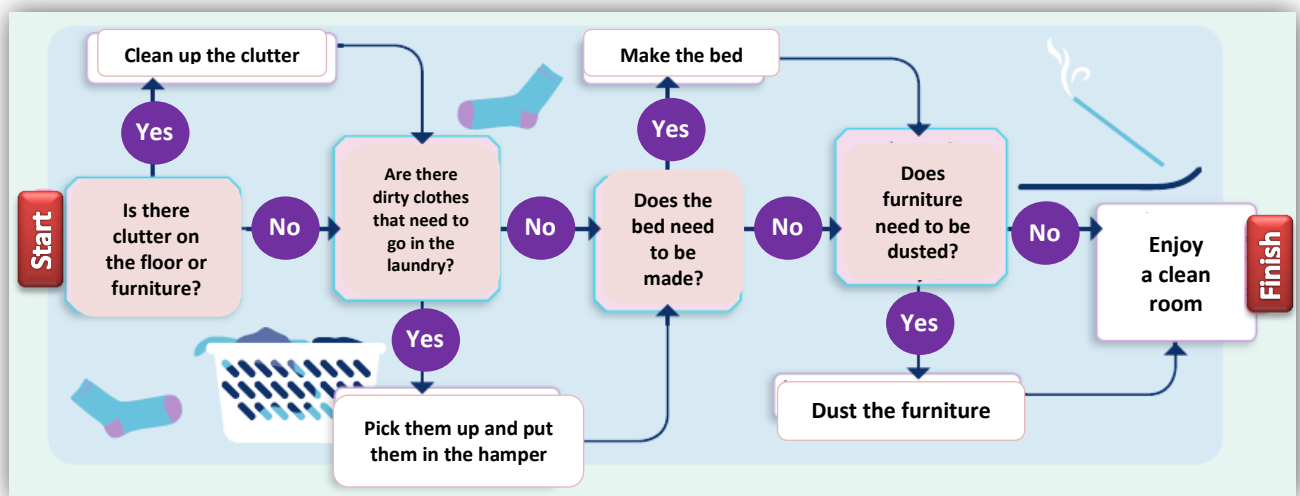
The important terms:



Flowchart:

- A flowchart is like coding, It represents a problem in logical and simple steps.
- A flowchart is a visual diagram that shows the steps of any process from beginning to end to solve a problem.
- It is using process boxes, flow lines/arrows and other symbols.

A flowchart about cleaning your room:



Vocabulary:

Coding	البرمجة	Maze	متاهة
flowchart	خريطة تدفق	laundry	غسيل ملابس
Clutter	فوضى	The hamper	سلة كبيرة
The floor	الأرضية	Dust	نظف من الغبار
furniture	الأثاث	Pick up	يلتقط

LESSON (7)

Graphic art

Microsoft Paint

It's a popular graphics editor. It's easy to create your own drawings or edit images on computer.

Steps To Open Microsoft Paint:

- Open Start-up Menu.
- Click Accessories.
- Click Paint.

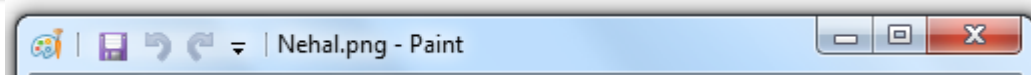


MS
Paint

ICT_Primary 4_Axis (4)

The components of Microsoft Paint screen:

1- Title bar

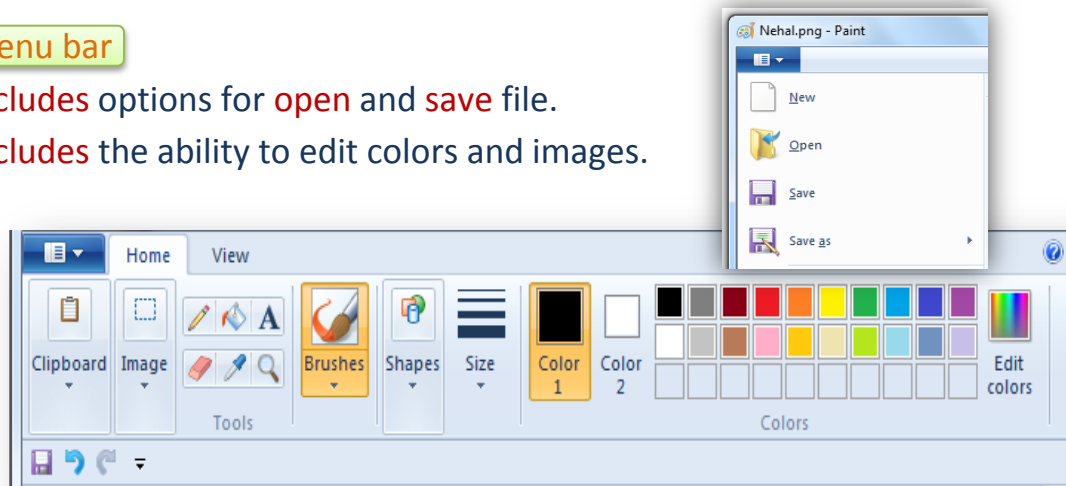


Includes file, program name & control buttons Like Word and Excel program

2- Menu bar

Includes options for open and save file.

Includes the ability to edit colors and images.



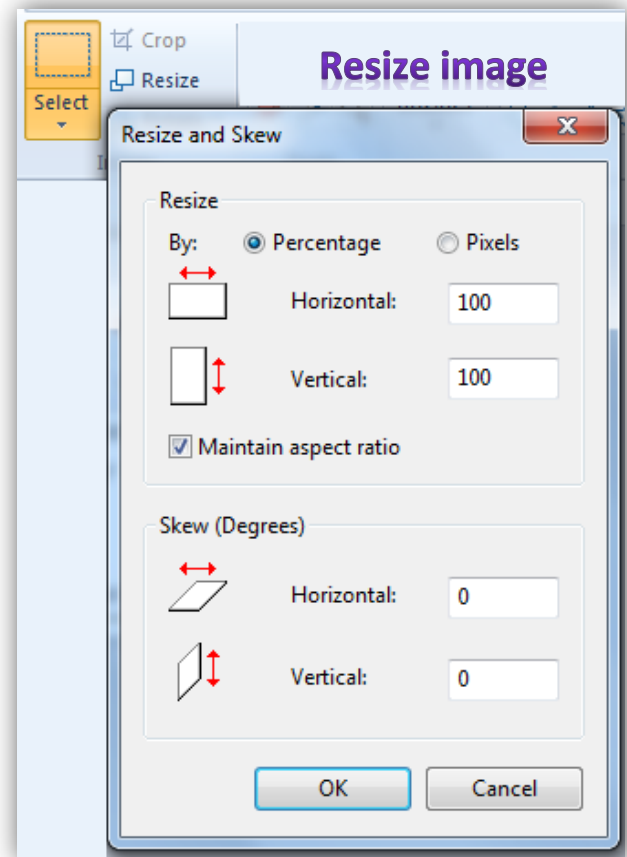
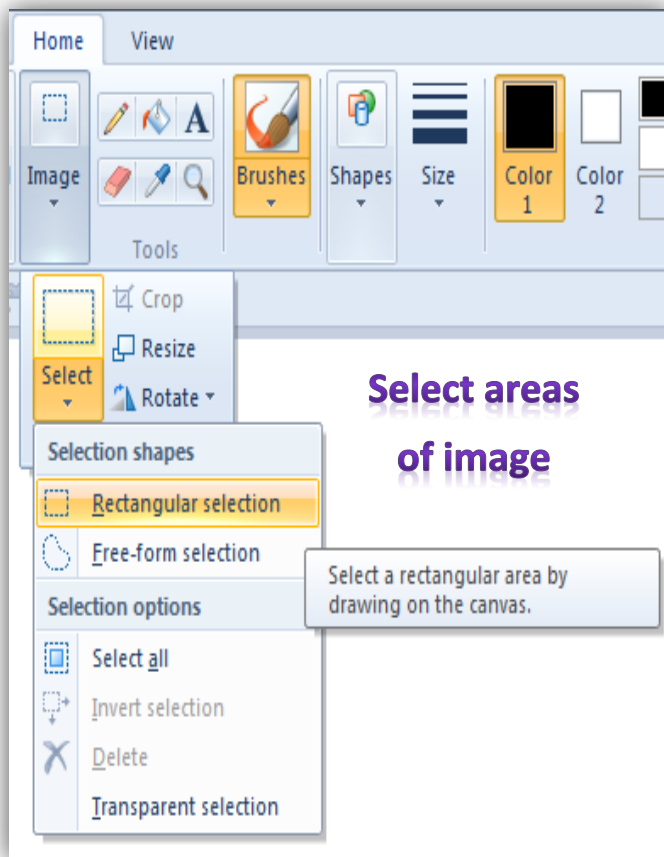
3- Toolbox.

Includes all the tools that you will need to make your drawing.

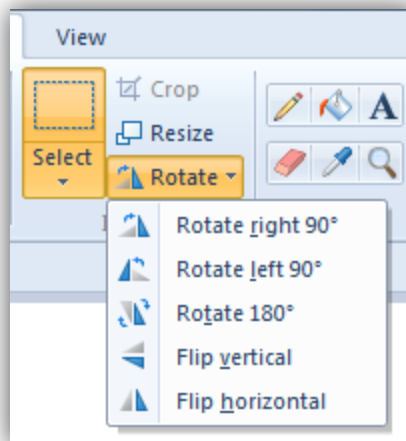
These are some of the tools:

	Ellipses Use to draw a circle or an oval shape.		Rectangle Use to crop an area of the photo.
	Magnifier Use to zoom image in or out.		Airbrush Use to a free draw.
	Pencil Use to a free draw.		Select Use to select and move objects.
	Line and curve Use to deaw lines and curves.		Text Use to write a text.
	Fill Use to fill colors using the color options		Eraser Use to erase line or mistakes in drawing.

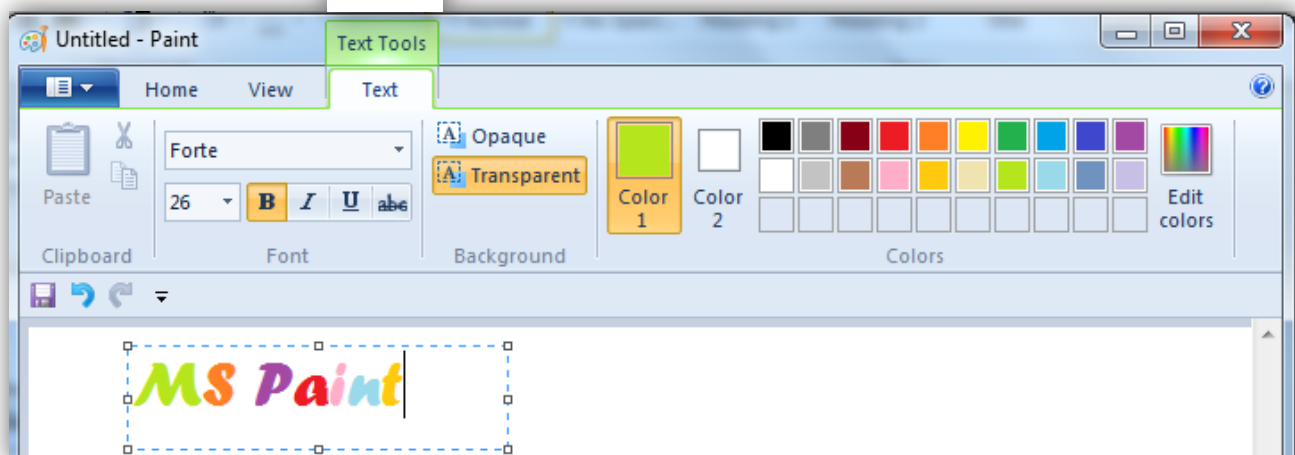
ICT_Primary 4_Axis (4)



Rotate image

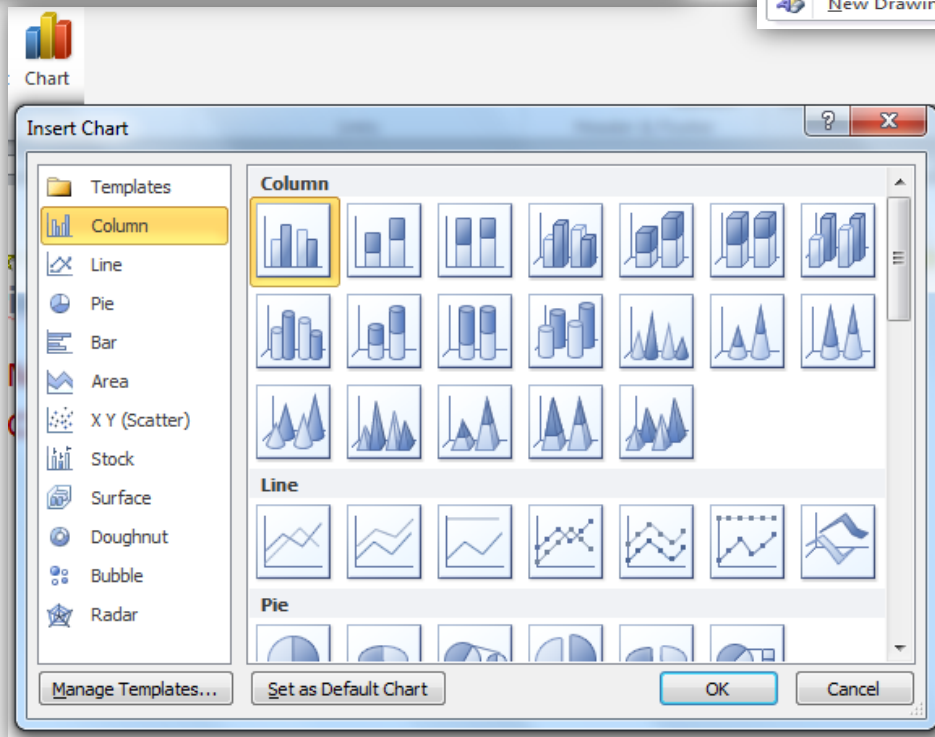
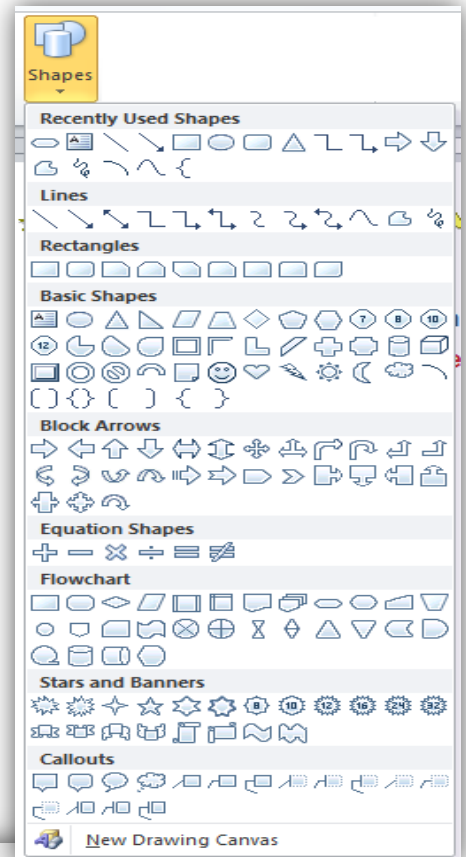
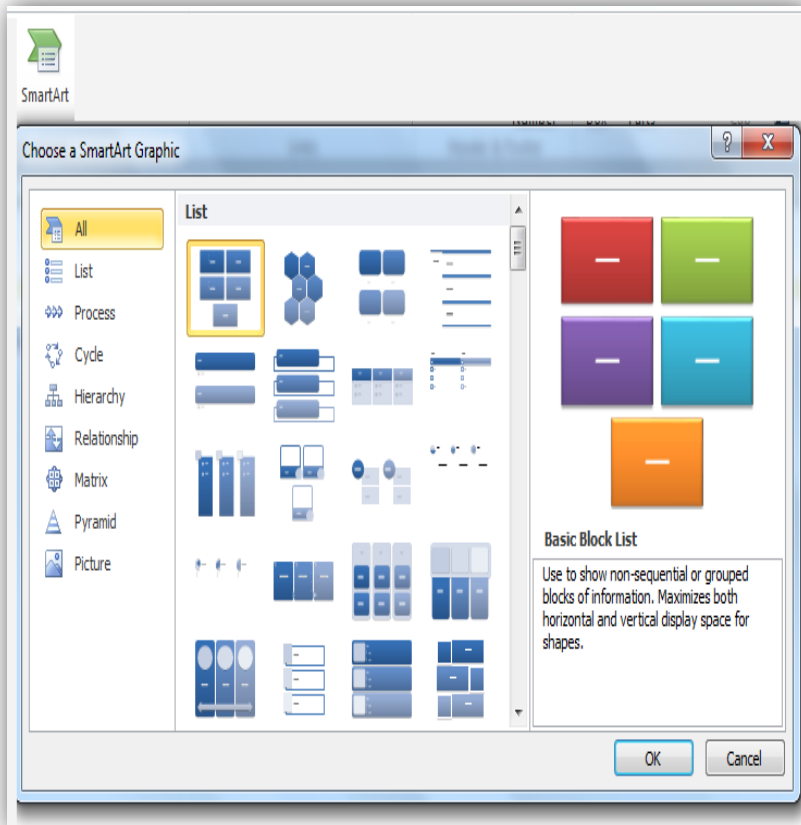
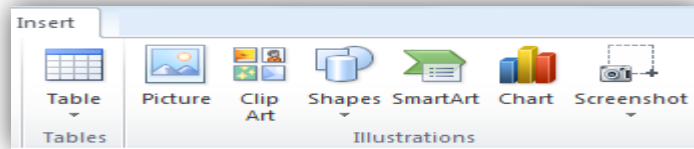


Write a text



ICT_Primary 4_Axis (4)

- Microsoft Word also offers graphic tools to create a graphic.
- Click on Insert menu to see the different options (SmartArt – Shapes – Chart).



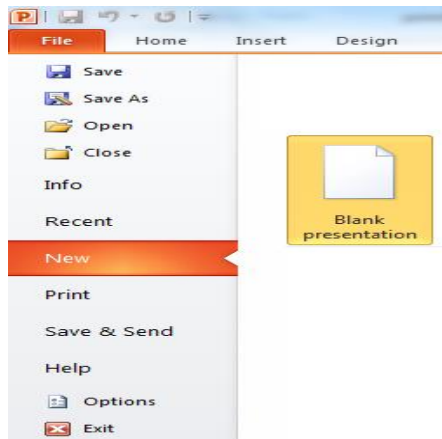
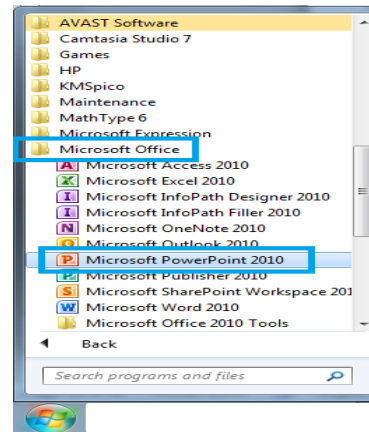
Microsoft PowerPoint:



- Microsoft PowerPoint allows you to create presentations that include text, animations, images and special effects.
- A slide is a presentation page that contains text and images.
- On the left side of the screen, you will see a thumbnail, or preview image, of each slide you're creating.
- When creating your presentation keep the following features in mind:
 - Avoid wordy paragraphs or sentences.
 - Be sure to use a font size and style that is readable.
 - Use relevant images instead of text whenever possible.

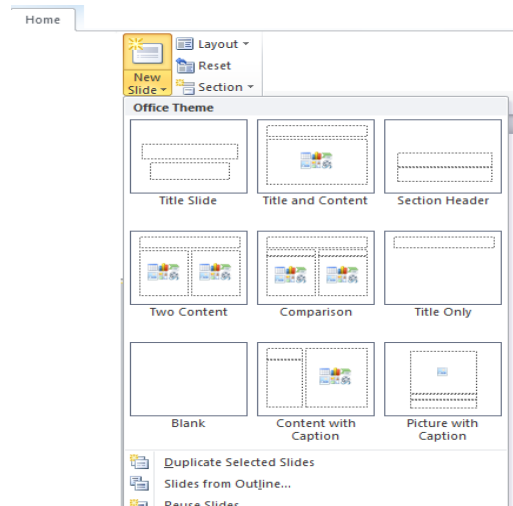
Steps to open Microsoft PowerPoint:

- Open start menu.
- Click all programs.
- Select Microsoft office.
- Click Microsoft PowerPoint.



Steps to create a new blank presentation:

- Open file menu.
- Click New.
- Double-click Blank presentation.



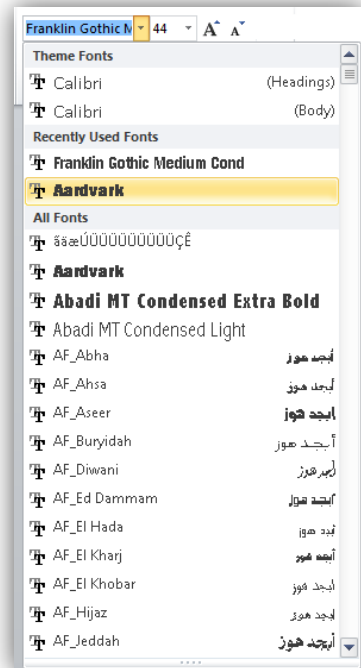
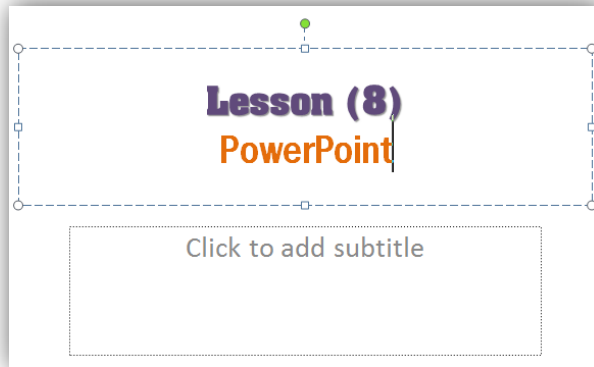
Steps to add a new slide and choose the layout:

- Open Home bar.
- Click New slide.
- Choose the layout.

ICT_Primary 4_Axis (4)

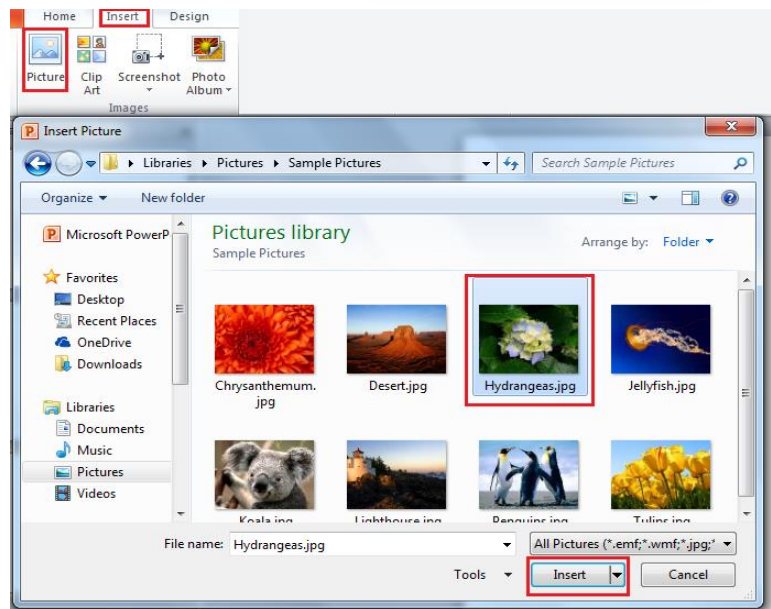
Steps to add text to your slide:

- Click on the text box on the screen.
- Choose font style and size.
- Type your text.



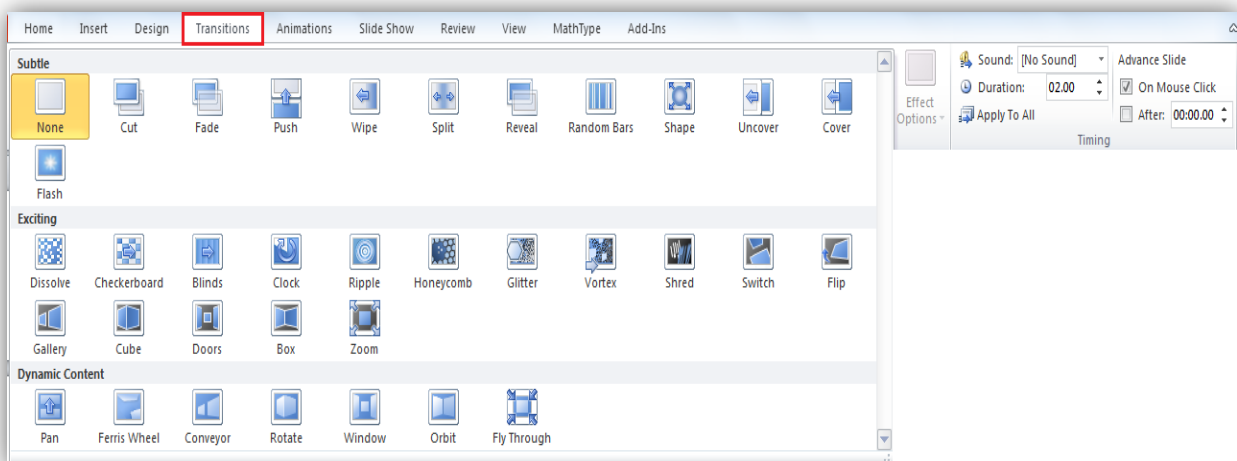
Steps to insert a picture from file:

- Click Insert menu.
- Click picture.
- Select picture.
- Click Insert.



Transitions

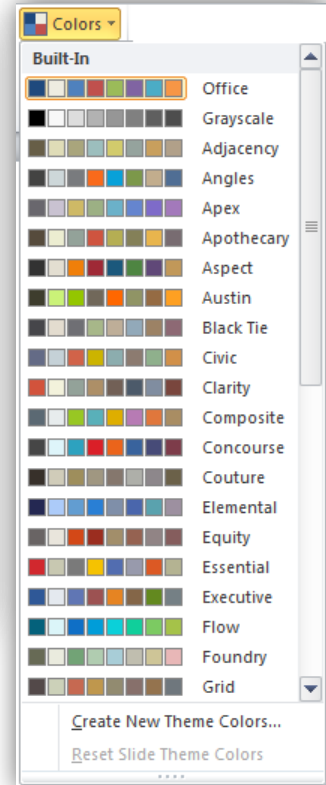
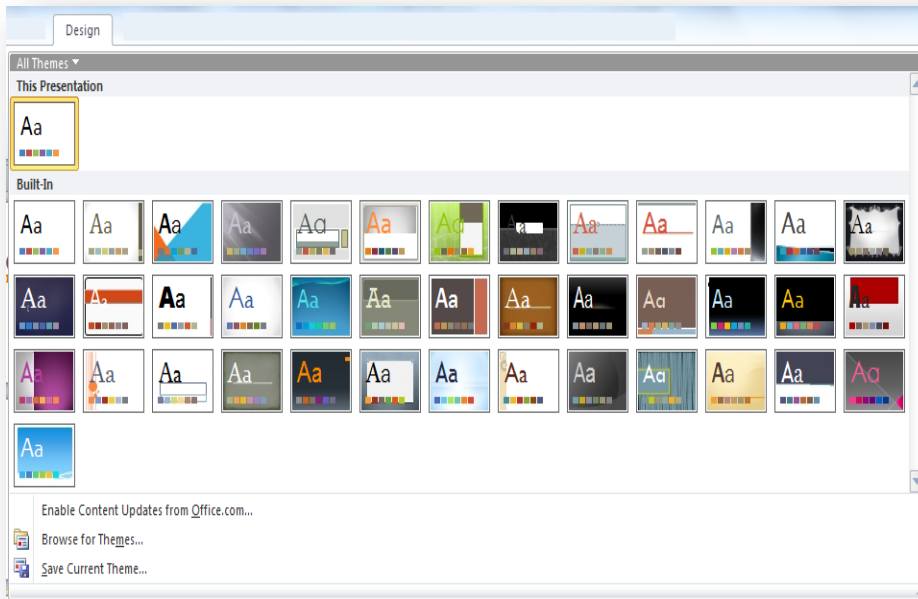
Choose a visual effect to use between each slide.



ICT_Primary 4_Axis (4)

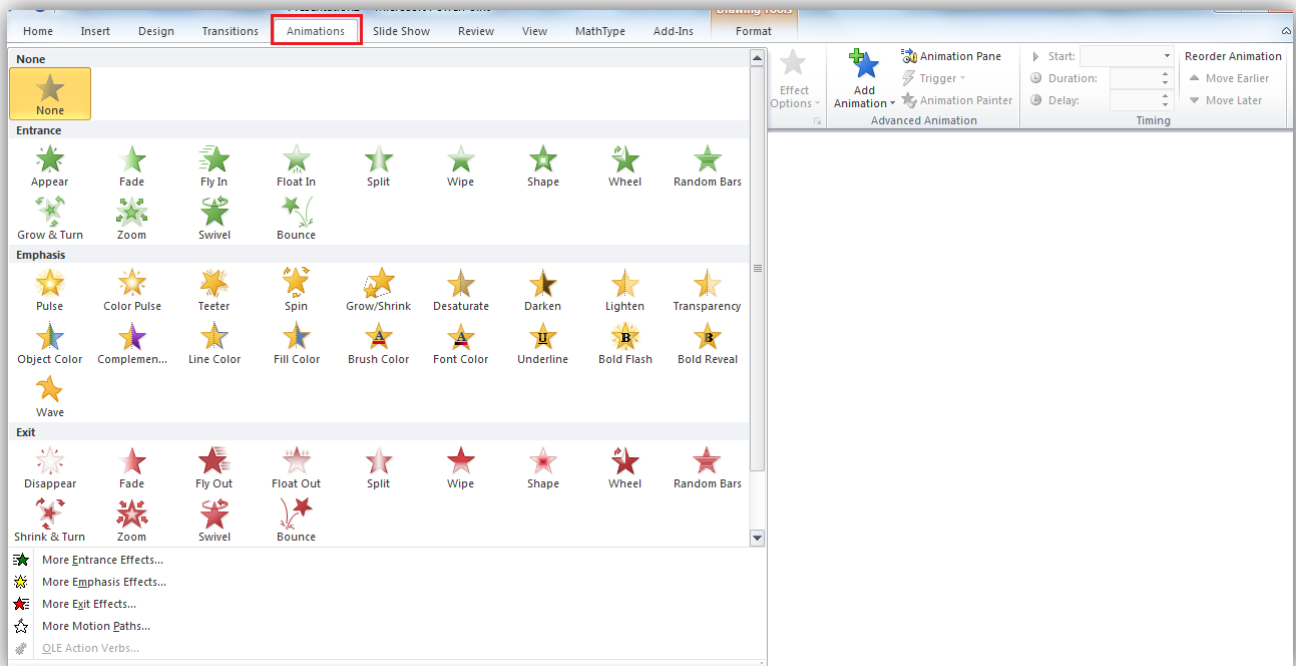
Design

Choose design options for each slide, including background colors.



Animations

Choose animated effects for each slide.



With my best wishes for success...